

that end, and not be prematurely cut off in the prosecution of his or her application.” In the present case, the first Office Action dated October 24, 2001 rejected claims 1-27 under either 35 U.S.C. Section 112 or Section 102, citing Brown et al. (U.S. Pat. No. 6,208,965). In a Response filed January 7, 2002, Applicants amended claims 1, 5, 12, 16, 21 and 23-26 to overcome the rejections. The next Office Action, dated May 7, 2002, the Examiner issued a restriction requirement defining three classes of claims. The Applicant elected claims 1 – 4 and 12 – 15 in Group I in a Response dated June 7, 2002.

The Examiner issued a Final Office Action dated October 3, 2002 rejecting claims 1 – 4 and 12 – 15 citing a newly-introduced prior art reference to Galler et al. (U.S. Pat. No. 5,991,720). The Galler et al. reference differs from the Brown et al. reference first cited against the claims. Applicants have not had any opportunity to respond to the Galler et al. reference and thus no final issue has been established with regard to the Examiner’s position on Galler et al. as compared to Applicants’ position. In this regard, issuing a final Office Action without providing Applicants the opportunity to respond to the citation of Galler et al. is premature. Therefore, to give Applicants an opportunity to respond to the cited prior art, Applicants respectfully request that the Examiner withdraw the Finality of the October 3, 2002 Office Action.

Rejection of Claims 1 – 4 and 12 – 15 Under Section 102

The Examiner rejected claims 1 – 4 and 12 - 15 under Section 102(e) in view of U.S. Patent 5,991,720 to Galler et al. (“Galler et al.”). Initially, Applicants note that a further reason to withdraw the finality of the Office Action is that the Examiner has cited an old version of 35 U.S.C. Section 102(e) instead of Section 102(e) updated by the Technical Amendment Act H.R. 2215 enacted on 11/02/02 but effective for

any patent application except when a prior art reference is a patent issued from an international application (IA) filed before 11/29/00. The Galler et al. reference is not an IA filed before 11/29/00. Therefore, the basis that the Examiner has set forth for rejection is an outdated section of the U.S. Code.

Claim 1

Turning to the merits of the case, Applicants submit that Galler et al. do not anticipate claim 1. Claim 1 recites a method for deriving a dynamic grammar from a set of pre-stored reference identifiers. After generating a plurality of selection identifiers and comparing the plurality of selection identifiers with the set of pre-stored reference identifiers to determine which selection identifiers are present in the set of pre-stored reference identifiers, the method comprises deriving the dynamic grammar using data elements that are associated with the pre-stored reference identifiers that match any one of the selection identifiers. As mentioned in the present specification, and without limiting the claimed invention, the present invention addresses the need in the art, for example, to simplify the manner in which a system can identify a user from a large customer database. The invention simplifies this process by generating the dynamic grammar from data elements that are associated with the pre-stored reference identifiers (which may represent in some case the entire customer database) and that match any one of the selection identifiers (which may be generated from user input). In this manner, the dynamic grammar can be generated from a subset of a larger database.

As will be explained below, Galler et al. fail to disclose at least this last step of deriving the dynamic grammar since the claimed dynamic grammar comprises data elements that are associated with the pre-stored reference identifiers. In contrast to the invention recited in claim 1, and as shown in FIG. 5 and explained by Galler et al.,

they teach passing the N-best and M-best hypothesis to the module 42 for building the dynamic grammar. Further, the purpose of Galler et al. differs from the purpose of the present invention thus highlighting the technical differences between claim 1 and Galler et al.'s disclosure.

Galler et al.'s approach of building a dynamic grammar involves building two recognition HMM models 26a and 26b as shown in their FIG. 5. The purpose of these two models is to accommodate users who may provide speech input by spelling names only ("H-A-N-S-O-N") and another mode of input where the user says the name and then spells the name ("Hanson, H-A-N-S-O-N"). A modified Viterbi decoder is applied to the two generated HMM models to generate an N-best hypothesis (for spelling only) and M-best hypothesis (for stating the name and then spelling). Col. 7, lines 10-35. These N-best and M-best hypothesis resulting from the recognizers 26a and 26b are passed to dynamic programming alignment modules 38a and 38b for accessing the associated name dictionary 39 against which the hypothesis are compared. Importantly, however, Galler et al. explain that when a single candidate does not result from the comparison of the two hypotheses with the named dictionary, their method involves passing the N-best and M-best hypothesis to module 42 for building a dynamic grammar. Col. 8, lines 11-18.

The Galler et al. approach differs from the present invention wherein the dynamic grammar is generated not from the plurality of selection identifiers (or N-best and M-best hypotheses as related by the Examiner) but from the data elements that are associated with the pre-stored reference identifiers that match any one of the selection identifiers. Galler et al. does not teach this approach to generating the dynamic grammar. For Galler et al. to teach this approach, they would have to show in FIG. 5 that a sub-set of the name dictionary database 39 would be used to build the

dynamic grammar. Instead, Galler et al. use the N-best and M-best hypotheses to build the dynamic grammars. Their approach, as mentioned above, highlights the different goals between the present invention and Galler et al. They desire to deal with different types of input where users only spell names or where they may say the name first and then spell the name. Thus using the two different N-best and M-best hypothesis is appropriate. However, their approach does not solve the problem addressed by the present invention, namely of deriving the dynamic grammar from data elements associated with the pre-stored reference identifiers that match any one of the selection identifiers, thus generating the dynamic grammar from a smaller set of reference identifiers than the original entire set.

Further, clearly Galler et al. do not teach deriving the dynamic grammar from a smaller set of data from the name dictionary in the manner recited in claim 1. For example, Galler et al. simply teach that if the result of the DP alignment is a single candidate, then the analysis from the comparison of the N-best or M-best hypothesis with the name dictionary was successful. However, if more than one candidate is returned from the name dictionary, then Galler et al. simply teach passing the N-best and M-best hypotheses to the module 42 for building the dynamic grammar.

For the above reasons, Applicants respectfully submit that claim 1 is allowable over the Galler et al. reference and that claim 1 is in condition for allowance. Applicants note that any reference to features that are not recited by claim 1 above are not meant to add limitations to the claims but merely to provide a context in which the claimed invention may be used.

Claims 2-4

Claims 2-4 depend from claim 1 and inherit the same limitations discussed above that render claim 1 patentable over the Galler et al. reference. Accordingly, Applicants respectfully submit that claims 2-4 are in condition for allowance as well.

Claims 12-15

Claims 12-15 are apparatus claims that correspond in principle to claim 1. Therefore, for the same reasons set forth above, applied in an apparatus context to claims 12-15, Applicants respectfully submit that claims 12-15 are in condition for allowance.


CONCLUSION

Having addressed the rejection of claims 1 – 4 and 12 – 15, Applicants respectfully submit that the subject application is in condition for allowance and a Notice to that effect is earnestly solicited. Further, Applicants respectfully request that the Examiner rescind the Finality of the October 3, 2002 Office Action as premature.

If any fees are required in connection with the filing of this response, please charge same to AT&T Corp. Deposit Account No. 01-2745, reference 112539. A copy of this sheet is enclosed for that purpose.

Respectfully submitted,

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25. (Amended) The apparatus according to claim 24, wherein each pre-stored reference identifier includes at least one data element associated therewith, and wherein the predetermined relationship exists between at least a portion of the predetermined identifier and the data element of the reference identifier provided by the means for providing.

26. (Amended) An apparatus for responding to at least one vocal input from a user, comprising:

- a processing device;
- a speech recognizer having an input for receiving the vocal input and an output in communication with the processing device;
- a pre-stored reference identifier database in communication with the processing device;
- a pre-stored reference identifier selection module in communication with the processing device; and
- a dynamic grammar memory in communication with the processing device.

REMARKS

Claims 1-27 remain pending in the above-referenced application and are submitted for the Examiner's reconsideration.

Claims 1 and 12 stand rejected under 35 U.S.C. § 112, ¶2, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as the invention. In view of the amendments made to claims 1 and 12, Applicants submit that this rejection has been obviated.

Claims 1-27 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,208,965 to Brown et al. ("Brown"). Applicants submit that as amended the claims are not anticipated by Brown. In particular, Applicants have amended each of the independent claims to recite that the reference identifiers are pre-stored reference identifiers. Brown does not identically show this limitation because according to Brown "the present invention [in the '965 patent] does not use a pre-stored set of reference identifiers to find a match for the input identifier." Col. 2, 11-29-31 (insertion added). Therefore, because Brown does not identically show every limitation of claims 1-27, Applicants submit that Brown does not anticipate these claims. Withdrawal of this rejection is therefore respectfully requested.